## NSLS Environmental Management System Environmental Management Program - FY 2005

## Environmental Management Approved by: R. Casey, Associate Chair Date: 2/1/2005

**Objective**: Ensure operational excellence in ESH and waste management programs.

**Target:** Evaluate synthetic oil as a means of reducing the generation rate of waste vacuum pump oil.

**Performance Indicator:** Satisfactory progress in evaluation of synthetic oil

Project	Person Responsible	COMPLETION DATES
Evaluate the feasibility of substituting synthetic oils as a replacement for regular oils in vacuum pump systems	Vacuum Engineer	9/30/05

## **Program Description:**

Regular vacuum pump oil requires replacement on a regular 6-12 month cycle. As a result, the NSLS generates 1000 – 2000 pounds annually of waste oil from this source. Replacement of pump oils with synthetic oil provides the potential for a significant reduction in the generation of waste oils if synthetic oils prove to have a much longer period between change-out.

Evaluation of synthetic oil was initiated in FY 2003. A number of tests are being conducted to determine vacuum characteristics when using synthetic oils as well as well the differences between change out periods. These vacuum pump tests are ongoing and need to be run for long periods to provide a reasonable level of confidence before implementing any recommended changes.

**Budget:** The budget for this program will be supported by the FY 2005 NSLS operating budget.